

MODIS IOT Weekly Report

Mission Operations Days: 2000/316 to 2000/322

November 10, 2000 20:00:00 GMT to November 17, 2000 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in B-side Science Mode

Blackbody	A Off; B On	Nominal
Calibration Electronics	A Off; B On	Nominal
Control Processor	A Off; B On	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A Off; B On	Nominal
FDDI Port	A On; B Off	Nominal
FIFO Memory	1 & 2 Off; 3 & 4 On	Nominal
Format Processor	A Off; B On	Nominal
Power Supply: 1	Off	Nominal
2	On	Nominal
PV FPAs: VIS	A Off; B On	Nominal
NIR	A Off; B On	Nominal
SMIR	A Off; B On	Nominal
LWIR	A Off; B On	Nominal
PC FPA: LWIR	A Off; B On	Nominal
Radiative Cooler:		
Outgas Heaters	All Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A Off; B On	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A Off; B On	Nominal
Flight Software	Rev BD + 2 patches	Nominal
Inhibit Ids Set	None	Nominal

TMONs enabled

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Nominal

This Week's Completed MODIS Activities:

Friday, November 10, 2000

None

Saturday, November 11, 2000

None

Sunday, November 12, 2000

None

Monday, November 13, 2000

None

Tuesday, November 14, 2000

None

Wednesday, November 15, 2000

Roll Maneuver:

320/22:15:29	ATC	Move Formatter to Night ahead by 3:23 to ensure 50/50 day/night
320/22:41:54	ATC	Begin Slew to -11.5456 degrees
320/22:47:43	ATC	Set Formatter to Day Rate
320/22:47:45	ATC	Set SCIABNORM Flag to ABNORM
320/22:47:47	ATC	PC DC Restore to OFF
320/22:47:49	ATC	PV DC Restore to OFF
320/22:47:51	ATC	Sector Rotation to -3072 (EA to SV and OBCs)
320/22:54:21	ATC	Sector Rotation to Zero (Normal)
320/22:54:23	ATC	PC DC Restore to ON
320/22:54:25	ATC	PV DC Restore to ON
320/22:54:27	ATC	Set SCIABNORM Flag to NORM
320/22:54:29	ATC	Set Formatter to Night Rate
320/22:59:56	ATC	Return to nominal attitude
320/23:11:41	ATC	Move Formatter to Day later by 3:23 to ensure 50/50 day/night

Thursday, November 16, 2000

None

Friday, November 17, 2000

None

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

Friday, November 17, 2000

Leonid Meteor shower Nov 17th & 18th: MODIS will remain in nominal B-side science operations, however, all calibration activities will be suspended during this time.

Saturday, November 18, 2000

None

Sunday, November 19, 2000

None

Monday, November 20, 2000

325/21:00:00 ATC Set Blackbody to 270K

Tuesday, November 21, 2000

326/15:00:00 ATC Set Blackbody to 280K

326/19:00:00 ATC Set Blackbody to 285K

326/21:00:00 ATC Set Blackbody to 290K

326/23:00:00 ATC Set Blackbody to 295K

326/23:01:00 ATC Set Blackbody duty cycle to FULL

Wednesday, November 22, 2000

327/01:00:00 ATC Set Blackbody to 300K

327/03:00:00 ATC Set Blackbody to 315K

327/05:00:00 ATC Set Blackbody to 270K

327/05:01:00 ATC Set Blackbody duty cycle to THIRD

Thursday, November 23, 2000

328/01:00:00 ATC Set Blackbody to 290K

328/09:48:37 - 10:22:10 ATC SRCA Full Radiometric (B)

Friday, November 24, 2000

329/10:29:10 - 11:20:49 ATC SRCA Full Spectral 30W Part I (B)

329/12:24:17 - 12:59:02 ATC SRCA Full Spectral 30W Part II (B)

329/13:46:23 - 14:37:39 ATC SRCA Full Spectral 10W Part I (B)

329/15:42:04 - 16:20:02 ATC SRCA Full Spectral 10W Part II (B)

Maneuvers:

None.

MODIS Anomalies:

No formatter anomalies have been detected since switching to B-side science operations. The MODIS IOT is continuing to monitor changes with the radiative cooler temperatures and focal plane power.

General Instrument Comments:

MODIS is in Science Mode on the B-side with the SVD and NAD open, operating with the Formatter Resolution Flight Software Patches (FRFSP). No new events have been witnessed by the FRFSP since the B-Side Transition on DOY 304.

MODIS Telemetry Trends:

The Radiative Cooler intermediate stage temperature has slowly been increasing since approximately day 240. During this time the LWIR focal plane heater margin has been decreasing. The IOT is continuing to trend these telemetry mnemonics.

Non-MODIS Significant Events:

None.

Limited Life Item Status:

SRCA 10W Lamp #1: 173.8 of 500 hours

SRCA 10W Lamp #2: 136.3 of 500 hours

SRCA 10W Lamp #3: 145.5 of 500 hours

SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 556.1 of 4000 hours

SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1453 of 3022 Movements

Nadir Aperture Door: 532 of 1316 Movements

Space View Door: 437 of 1316 Movements